

acm Transactions on Mathematical Software

Volume 14 • 1988

Editor-in-Chief

John R. Rice

Algorithms Editor

Richard J. Hanson

Associate Editors

David M. Allen
Paul Boggs
Ronald F. Boisvert
Tony F. Chan
Jack Dongarra
Fred N. Fritsch
W. Morven Gentleman

Daniel S. Hirschberg
Roy E. Marsten
John Reid
Michael A. Saunders
Hans J. Stetter
Paul Wang
David Y. Y. Yun

Published by the Association for Computing Machinery

Copyright © 1988 Association for Computing Machinery
11 West 42 Street, New York, NY 10036

Corrigenda: pp. 111, 297, 399

Contributed Papers

- Aluffi-Pentini, F., Parisi, V., and Zirilli, F.** A Global Optimization Algorithm Using Stochastic Differential Equations. Vol. 14, No. 4 (Dec. 1988), p. 345
- Ammann, L., and Van Ness, J.** A Routine for Converting Regression Algorithms into Corresponding Orthogonal Regression Algorithms. Vol. 14, No. 1 (Mar. 1988), p. 76
- Butcher, J. C.** Towards Efficient Implementation of Singly-Implicit Methods. Vol. 14, No. 1 (Mar. 1988), p. 68
- Cohen, M. S.** See Hull, T. E. Vol. 14, No. 3 (Sept. 1988), p. 201
- Dongarra, J. J., Du Croz, J., Hammarling, S., and Hanson, R. J.** An Extended Set of FORTRAN Basic Linear Algebra Subprograms. Vol. 14, No. 1 (Mar. 1988), p. 1
- Du Croz, J.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Duff, I. S., and Wiberg, T.** Remarks on Implementations of $O(n^{1/2})$ Assignment Algorithms. Vol. 14, No. 3 (Sept. 1988), p. 267
- Freeman, T. S., Imirzian, G. M., Kaltofen, E., and Yagati, L.** Dagwood: A System for Manipulating Polynomials Given by Straight-Line Programs. Vol. 14, No. 3 (Sept. 1988), p. 218
- Garavelli, J. S.** An Algorithm for The Multiplication of Symmetric Polynomials. Vol. 14, No. 4 (Dec. 1988), p. 337
- Garbow, B. S., Giunta, G., Lyness, J. N., and Murl, A.** Software for an Implementation of Weeks' Method for the Inverse Laplace Transform Problem. Vol. 14, No. 2 (June 1988), p. 163
- Giunta, G.** See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 163
- Grimes, R. G., and Simon, H. D.** Solution of Large, Dense Symmetric Generalized Eigenvalue Problems Using Secondary Storage. Vol. 14, No. 3 (Sept. 1988), p. 241
- Hammarling, S.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Hanson, R. J.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Higham, N. J.** FORTRAN Codes for Estimating The One-Norm of a Real or Complex Matrix, with Applications to Condition Estimation. Vol. 14, No. 4 (Dec. 1988), p. 381

acm Transactions on Mathematical Software

Volume 14 • 1988

Editor-in-Chief

John R. Rice

Algorithms Editor

Richard J. Hanson

Associate Editors

David M. Allen
Paul Boggs
Ronald F. Boisvert
Tony F. Chan
Jack Dongarra
Fred N. Fritsch
W. Morven Gentleman

Daniel S. Hirschberg
Roy E. Marsten
John Reid
Michael A. Saunders
Hans J. Stetter
Paul Wang
David Y. Y. Yun

Published by the Association for Computing Machinery

Copyright © 1988 Association for Computing Machinery
11 West 42 Street, New York, NY 10036

Corrigenda: pp. 111, 297, 399

Contributed Papers

- Aluffi-Pentini, F., Parisi, V., and Zirilli, F.** A Global Optimization Algorithm Using Stochastic Differential Equations. Vol. 14, No. 4 (Dec. 1988), p. 345
- Ammann, L., and Van Ness, J.** A Routine for Converting Regression Algorithms into Corresponding Orthogonal Regression Algorithms. Vol. 14, No. 1 (Mar. 1988), p. 76
- Butcher, J. C.** Towards Efficient Implementation of Singly-Implicit Methods. Vol. 14, No. 1 (Mar. 1988), p. 68
- Cohen, M. S.** See Hull, T. E. Vol. 14, No. 3 (Sept. 1988), p. 201
- Dongarra, J. J., Du Croz, J., Hammarling, S., and Hanson, R. J.** An Extended Set of FORTRAN Basic Linear Algebra Subprograms. Vol. 14, No. 1 (Mar. 1988), p. 1
- Du Croz, J.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Duff, I. S., and Wiberg, T.** Remarks on Implementations of $O(n^{1/2})$ Assignment Algorithms. Vol. 14, No. 3 (Sept. 1988), p. 267
- Freeman, T. S., Imirzian, G. M., Kaltofen, E., and Yagati, L.** Dagwood: A System for Manipulating Polynomials Given by Straight-Line Programs. Vol. 14, No. 3 (Sept. 1988), p. 218
- Garavelli, J. S.** An Algorithm for The Multiplication of Symmetric Polynomials. Vol. 14, No. 4 (Dec. 1988), p. 337
- Garbow, B. S., Giunta, G., Lyness, J. N., and Murl, A.** Software for an Implementation of Weeks' Method for the Inverse Laplace Transform Problem. Vol. 14, No. 2 (June 1988), p. 163
- Giunta, G.** See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 163
- Grimes, R. G., and Simon, H. D.** Solution of Large, Dense Symmetric Generalized Eigenvalue Problems Using Secondary Storage. Vol. 14, No. 3 (Sept. 1988), p. 241
- Hammarling, S.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Hanson, R. J.** See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 1
- Higham, N. J.** FORTRAN Codes for Estimating The One-Norm of a Real or Complex Matrix, with Applications to Condition Estimation. Vol. 14, No. 4 (Dec. 1988), p. 381

- Hull, T. E., Cohen, M. S., Sawchuck, J. T. M., and Wortman, D. B. Exception Handling in Scientific Computing. Vol. 14, No. 3 (Sept. 1988), p. 201
- Imirzian, G. M., See Freeman, T. S. Vol. 14, No. 3 (Sept. 1988), p. 218
- Kaltofen, E. See Freeman, T. S. Vol. 14, No. 3 (Sept. 1988), p. 218
- Kramer, M. A. See Leis, J. R. Vol. 14, No. 1 (Mar. 1988), p. 45
- Leis, J. R., and Kramer, M. A. The Simultaneous Solution and Sensitivity Analysis of Systems Described by Ordinary Differential Equations. Vol. 14, No. 1 (Mar. 1988), p. 45
- Lyness, J. N. See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 163
- Melhem, R. G., and Ramarao, K. V. S. Multicolor Reordering of Sparse Matrices Resulting from Irregular Grids. Vol. 14, No. 2 (June 1988), p. 117
- Minh, D. L. Generating Gamma Variates. Vol. 14, No. 3 (Sept. 1988), p. 261
- Murli, A. See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 163
- Parisi, V. See Aluffi-Pentini, F. Vol. 14, No. 4 (Dec. 1988), p. 345
- Prusinkiewicz, P. See Wan, S. J. Vol. 14, No. 2 (June 1988), p. 153
- Ramarao, K. V. S. See Melhem, R. G. Vol. 14, No. 2 (June 1988), p. 117
- Renka, R. J. Multivariate Interpolation of Large Sets of Scattered Data. Vol. 14, No. 2 (June 1988), p. 139
- Robertazzi, T. G., and Schwartz, S. C. Best "Ordering" for Floating-Point Addition. Vol. 14, No. 1 (Mar. 1988), p. 101
- Sawchuck, J. T. M. See Hull, T. E. Vol. 14, No. 3 (Sept. 1988), p. 201
- Schwartz, S. C. See Robertazzi, T. G. Vol. 14, No. 1 (Mar. 1988), p. 101
- Sewell, G. Plotting Contour Surfaces of a Function of Three Variables. Vol. 14, No. 1 (Mar. 1988), p. 33
- Simon, H. D. See Grimes, R. G. Vol. 14, No. 3 (Sept. 1988), p. 241
- Van Ness, J. C. See Ammann, L. Vol. 14, No. 1 (Mar. 1988), p. 76
- Vrahatis, M. N. Solving Systems of Nonlinear Equations Using the Nonzero Value of the Topological Degree. Vol. 14, No. 4 (Dec. 1988), p. 312
- Wan, S. J., Wong, S. K. M., and Prusinkiewicz, P. An Algorithm for Multidimensional Data Clustering. Vol. 14, No. 2 (June 1988), p. 153
- Wiberg, T. See Duff, I. S. Vol. 14, No. 3 (Sept. 1988), p. 267
- Wong, S. K. M. See Wan, S. J. Vol. 14, No. 2 (June 1988), p. 153
- Wortman, D. B. See Hull, T. E. Vol. 14, No. 3 (Sept. 1988), p. 201
- Yagati, L. See Freeman, T. S. Vol. 14, No. 3 (Sept. 1988), p. 218
- Zirilli, F. See Aluffi-Pentini, F. Vol. 14, No. 4 (Dec. 1988), p. 345

Algorithms 1988

Remark on Algorithm 603. Vol. 14, No. 2 (June 1988), p. 196

- Aluffi-Pentini, F., Parisi, V., and Zirilli, F. Algorithm 667. SIGMA: A Stochastic Integration Global Minimization Algorithm. Vol. 14, No. 4 (Dec. 1988), p. 366
- Bratley, P., and Fox, B. L. Algorithm 659. Implementing Sobol's Quasirandom Sequence Generator. Vol. 14, No. 1 (Mar. 1988), p. 88
- Cody, W. J. Algorithm 665: MACHAR: A Subroutine to Dynamically Determine Machine Parameters. Vol. 14, No. 4 (Dec. 1988), p. 303
- Cormack, R. S., and Hill, I. D. Remarks on Algorithm 346. Vol. 14, No. 3 (Sept. 1988), p. 288
- Dongarra, J. J., Du Croz, J., Hammarling, S., and Hanson, R. J. Algorithm 656. An Extended Set of Basic Linear Algebra Subprograms: Model Implementation and Test Programs. Vol. 14, No. 1 (Mar. 1988), p. 18
- Du Croz, J. See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 18
- Fox, B. L. See Bratley, P. Vol. 14, No. 1 (Mar. 1988), p. 88
- Garbow, B. S., Giunta, G., Lyness, J. N., and Murli, A. Algorithm 662. A FORTRAN Software Package for the Numerical Inversion of the Laplace Transform Based on Weeks' Method. Vol. 14, No. 2 (June 1988), p. 171
- Giunta, G. See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 171
- Hammarling, S. See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 18
- Hanson, R. J. See Dongarra, J. J. Vol. 14, No. 1 (Mar. 1988), p. 18
- Hill, I. D. See Cormack, R. S. Vol. 14, No. 3 (Sept. 1988), p. 288

- Kachitvichyanukul, V., and Schmeiser, B. W.** Algorithm 668. H2PEC: Sampling from the Hypergeometric Distribution. Vol. 14, No. 4 (Dec. 1988), p. 397
- Kramer, M. A.** See Leis, J. R. Vol. 14, No. 1 (Mar. 1988), p. 61
- Krogh, F. T.** Algorithms Policy. Vol. 14, No. 3 (Sept. 1988), p. 290
- Leis, J. R., and Kramer, M. A.** Algorithm 658. ODESSA: An Ordinary Differential Equation Solver with Explicit Simultaneous Sensitivity Analysis. Vol. 14, No. 1 (Mar. 1988), p. 61
- Louter-Nool, M.** Algorithm 663. Translation of Algorithm 539: Basic Linear Algebra Subprograms for FORTRAN Usage in FORTRAN 200 for the Cyber 205. Vol. 14, No. 2 (June 1988), p. 177
- Lyness, J. N.** See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 171
- Murli, A.** See Garbow, B. S. Vol. 14, No. 2 (June 1988), p. 171
- Parisi, V.** See Aluffi-Pentini, F. Vol. 14, No. 4 (Dec. 1988), p. 366
- Renka, R. J.** Algorithm 660. QSHEP2D. Quadratic Shepard Method for Bivariate Interpolation of Scattered Data. Vol. 14, No. 2 (June 1988), p. 149
- Renka, R. J.** Algorithm 661. QSHEP3D: Quadratic Shepard Method for Trivariate Interpolation of Scattered Data. Vol. 14, No. 2 (June 1988), p. 151
- Schmeiser, B. W.** See Kachitvichyanukul, V. Vol. 14, No. 4 (Dec. 1988), p. 397
- Schrauf, G.** Algorithm 664. A Gauss Algorithm to Solve Systems with Large Banded Matrices Using Random-Access Disk Storage. Vol. 14, No. 3 (Sept. 1988), p. 257
- Sewell, G.** Algorithm 657. Software for Plotting Contour Surfaces of a Function of Three Variables. Vol. 14, No. 1 (Mar. 1988), p. 42
- Vrahatis, M. N.** Algorithm 666. CHABIS: A Mathematical Software Package for Locating and Evaluating Roots of Systems of Nonlinear Equations. Vol. 14, No. 4 (Dec. 1988), p. 330
- Zirilli, F.** See Aluffi-Pentini, F. Vol. 14, No. 4 (Dec. 1988), p. 366

